IN THE CLAIMS:

1. (Currently amended) Method for providing a polymeric implant object with a crystalline calcium phosphate (CaP) coating, said method comprising the step of irradiating a polymeric substrate having deposited thereon an amorphous CaP coating with an F_2 laser with a wavelength of about 157 nm and having an energy of 10-1000 mJ/cm^2.

2. (Previously presented) Method according to claim 1, wherein the irradiating with an F_2 laser having an energy of 10-1000 mJ/cm^2 is carried out during deposition of a CaP coating onto a polymeric substrate.

3. (Previously presented) Method according to claim 1 wherein the polymeric substrate comprises at least one selected from the group consisting of polyethylene (PE), poly(ethyleneterephthalate) (PET), polytetrafluoroethylene (PFTE), polystyrene (PS), poly-L-lactic acid (PLLA), polydimethylsiloxane (PDMS), polyimide (PI), polyglycolic acid (PGA), polypropylene fumarate (PPF) and polybutylterephthalate (PBT).

4. (Previously presented) Method according to claim 1 wherein the CaP coating is deposited using any method suitable for depositing a CaP coating, said deposited CaP coating being amorphous.

5. (Currently amended) Method according to claim 4, wherein the method suitable for depositing a CaP coating is selected from plasma spraying, biomimetic deposition, laser deposition, ion beam deposition and RF magnetron sputter deposition or combinations thereof~~, preferably RF magnetron sputter deposition~~.

6. (Cancelled)

7. (Previously presented) Method according to claim 1, wherein the laser light has an energy of 10-500 mJ/cm^2.

8. (Previously presented) Method according to claim 1 wherein the position of the laser relative to the object to be irradiated is controlled thereby creating a pattern of crystallisation on the irradiated object.

9. (Withdrawn) Polymeric implant object obtainable by the method according to claim 1.

10. (Withdrawn) Polymeric implant object according to claim 9, said object comprising a polymeric substrate having a crystalline CaP coating, said crystalline CaP coating having a thickness of at least 10 nm, but less than 1000 nm.

11. (Withdrawn) Polymeric implant object according to claim 9, wherein said implant is a fracture fixation plate, fixation screw, medullary nail, acetabular cup, or a guided tissue regeneration membrane.

12. (Withdrawn) Polymeric implant object according to claim 9, wherein said implant is of flexible polymeric material.

13. (Previously presented) Method according to claim 2 wherein the polymeric substrate comprises at least one selected from the group consisting of polyethylene (PE), poly(ethyleneterephthalate) (PET), polytetrafluoroethylene (PFTE), polystyrene (PS), poly-L-lactic acid (PLLA), polydimethylsiloxane (PDMS), polyimide (PI), polyglycolic acid (PGA), polypropylene fumarate (PPF) and polybutylterephthalate (PBT).

14. (Withdrawn) Polymeric implant object according to claim 10, wherein said implant is a fracture fixation plate, fixation screw, medullary nail, acetabular cup, or a guided tissue regeneration membrane.

15. (Withdrawn) Polymeric implant object according to claim 10, wherein said implant is of flexible polymeric material.